Claim listing:

Claims 1-2 (Currently amended)

Claim number 1 amendment:

Claim number 1(Original): (mike 8001 & 8001-1induction motor design FIG.4)

What I claim as my invention is the idea to put part of the dome of a hermetic (or semi hermetic) refrigeration (or a/c) system between the motor stator electrical winding and motor rotor to isolate these two in different medium to solve the heating problem.

Claim number 1(New): (mike 8001 FIG.4, FIG.4-4 & 8001-1induction motor design FIG.4-8)

~~What I claim as my invention is the idea to put part of the dome of a hermetic (or semi hermetic) refrigeration (or a/c) system between the motor stator electrical winding and motor rotor to isolate these two in different medium to solve the heating problem.~~

What I claim as my invention is the repositioned dome of a hermetic (or semi hermetic) refrigeration (or a/c) system as shown in FIG.4,4-1(the dome is shown with heavy line dashed or solid). The original dome is repositioned inside the

motor to leave the stator electrical winding and stator and most part of stator pole outside the dome, seals the rest small part of stator pole along with rotor assembly and compressor, refrigerant inside the dome as shown in FIG.4(mike 8001 induction motor design, the dome is shown with heavy line, dashed or solid ), FIG.4-1(enlarged part of FIG.4, the dome is shown with heavy solid or heavy dashed ), FIG.4-2(enlarged part of FIG.4-1), FIG.4-3(enlarged part of FIG.4-1), FIG.4-4(cross section view of FIG.4-3), FIG.4-5(mike 8001 design shown with electric winding), FIG.4-6(cross section view of FIG.4-5), FIG.4-7(mike 8001-1 induction motor design with the edge of the stator pole is in the same plane as the inside surface of the dome), FIG.4-8(cross section view of FIG.4-7). Compare the original dome as shown in FIG.3 to the repositioned dome as shown in FIG.4. The stator poles go through the dome to face rotor directly. There is nothing between the stator pole and rotor. The distance between the motor stator and rotor will be the same as that in a traditional motor so motor efficiency will not be reduced. There is no electric wire entrance of the dome because the electric winding has been left outside the dome. The dome is completely sealed and gets no chance to cause leaking. The gaps between laminated stator pieces should be sealed to prevent refrigerant leaking. The material of the part of dome, that is surrounding the rotor assembly (FIG. 4-1), should be nonmagnetic (or diamagnetic) material so it will not interfere with stator magnetic field. The new positioned dome design also separate refrigerant from electric winding to prevent the refrigerant getting burned by the short circuit of the winding.

Claim number 2 amendment:

Claim number 2(Original): (mike 8002 stator design)

What I claim as my invention is the idea to cut the stator poles of mike 8001(or 8001-1) induction motor design in a way shown in FIG.7 (mike 8002 stator design), so the stator electrical winding and most part of stator pole with stator body can be detached from the rest part of motor and replaced easily.

Claim number 2(New): (mike 8002 stator design)

~~What I claim as my invention is the idea to cut the stator poles of mike 8001(or 8001-1) induction motor design in a way shown in FIG.7 (mike 8002 stator design), so the stator electrical winding and most part of stator pole with stator body can be detached from the rest part of motor and replaced easily.~~

What I claim as my invention is the detachable stator with its winding (shown in FIG.7, 7-1,7-2, 7-3, the part which is outside the dashed line). The mike 8002 stator design cuts the stator poles of mike 8001(or 8001-1) induction motor design motor in a way shown in FIG.7, 7-1 so the stator electrical winding and most part of stator pole with stator body can be detached from the rest part of motor easily. It is also very easy to put back a new stator and its winding to the motor. When the stator with the electric winding has been detached from the dome, the dome still remains completely sealed condition because the end part of the stator poles have been welded

with the dome and those gaps between the laminated stator pieces have been sealed as mentioned in the Specification. This design will reduce the motor efficiency due to the gap in stator pole after cutting. This design is only suitable for where the reliability is a major concern but not the motor efficiency.

Claims(1-2)(New) in clean version

Claim number 1: (mike 8001 FIG.4, FIG.4-4 & 8001-1induction motor design FIG.4-8)

What I claim as my invention is the repositioned dome of a hermetic (or semi hermetic) refrigeration (or a/c) system as shown in FIG.4,4-1(the dome is shown with heavy line dashed or solid). The original dome is repositioned inside the motor to leave the stator electrical winding and stator and most part of stator pole outside the dome, seals the rest small part of stator pole along with rotor assembly and compressor, refrigerant inside the dome as shown in FIG.4(mike 8001 induction motor design, the dome is shown with heavy line, dashed or solid ), FIG.4-1 (enlarged part of FIG.4, the dome is shown with heavy solid or heavy dashed ), FIG.4-2(enlarged part of FIG.4-1), FIG.4-3(enlarged part of FIG.4-1), FIG.4-4(cross section view of FIG.4-3), FIG.4-5(mike 8001 design shown with electric winding), FIG.4-6(cross section view of FIG.4-5), FIG.4-7(mike 8001-1 induction motor design with the edge of the stator pole is in the same plane as the inside surface of the dome), FIG.4-8(cross section view of FIG.4-7). Compare the original dome as shown in FIG.3 to the repositioned dome as shown in FIG.4. The stator poles go through the dome to face rotor directly. There is nothing between the stator pole and rotor. The distance between the motor stator and rotor will be the same as that in a traditional motor so motor efficiency will not be reduced. There is no electric wire entrance of the dome because the electric winding has been left outside the dome. The dome is completely sealed and gets no chance to cause

leaking. The gaps between laminated stator pieces should be sealed to prevent refrigerant leaking. The material of the part of dome, that is surrounding the rotor assembly (FIG. 4-1), should be nonmagnetic (or diamagnetic) material so it will not interfere with stator magnetic field. The new positioned dome design also separate refrigerant from electric winding to prevent the refrigerant getting burned by the short circuit of the winding.

Claim number 2: (mike 8002 stator design)

What I claim as my invention is the detachable stator with its winding (shown in FIG.7, 7-1,7-2, 7-3, the part which is outside the dashed line). The mike 8002 stator design cuts the stator poles of mike 8001(or 8001-1) induction motor design motor in a way shown in FIG.7, 7-1 so the stator electrical winding and most part of stator pole with stator body can be detached from the rest part of motor easily. It is also very easy to put back a new stator and its winding to the motor. When the stator with the electric winding has been detached from the dome, the dome still remains completely sealed condition because the end part of the stator poles have been welded with the dome and those gaps between the laminated stator pieces have been sealed as mentioned in the Specification. This design will reduce the motor efficiency due to the gap in stator pole after cutting. This design is only suitable for where the reliability is a major concern but not the motor efficiency.